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ECONOMICS, STATISTICS AND FISCAL ANALYSIS DIVISION

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ECONOMIC TRENDS

FIRST RESULTS FROM THE 1986 CENSUS OF AGRICULTURE

1. Introduction

This issue of Economic Trends provides a summary look at the 1986 Census of Agriculture that was conducted on June 3, 1986. Statistics from that Census of Agriculture, released to the public in June of 1987, recorded 293,089 census-farms in Canada, of which 2,833 were in Prince Edward Island (a census-farm being any agricultural holding with sales of $250 or more the previous year). These 2,833 farms occupied 673,000 acres of P.E.I's total land area of 1,399,000 acres and had a capital value of $738. 6 million in 1986.

2. Number and Size of Farms

The statistics provided in the following Tables and Diagrams have been taken from various Censuses of Agriculture and it should be noted that the definition of a census farm for the 1981 and 1986 Censuses is somewhat different from that of previous Censuses. Earlier Censuses defined a census farm as an agricultural holding with $50 or more sales whereas the later two censuses have $250 as the cut off.

Table 1 shows that the 2,833 census-farms on Prince Edward Island in 1986 are significantly less than the 12,865 farms that existed in 1931. The reduced number of farms is a continuation of a trend that has been occurring throughout the century. The general picture is one of declining number of farms occupying a smaller percentage of the total land area, coupled with a movement to larger farms. The average size of farm holdings has risen from 93 acres in 1931 to 238 acres in 1986. Table 1 reveals that the land area in farm use decreased from 85.2 per cent of the total land area in 1931 to 48.1 per cent in 1986.

Table 1

TOTAL NUMBER AND AVERAGE SIZE OF FARMS

PRINCE EDWARD ISLAND, 1931-1986

	1931	1941	1951	1961	1971	1976	1981	1986
Total Land Area (1) ('000 of acres)	1,398	1,398	1,398	1,398	1,399	1,399	1,399	1,399
Area in Farms ('000 of acres)	1,191	1,169	1,095	960	775	731	699	673
Percentage of Total Land Area in Farms	85.2	83.6	78.3	68.7	55.4	52.3	50.0	48.1
Total number of farms	12,865	12,230	10,137	7,335	4,543	3,677	3,154	2,833
Average size of Farms (acres)	93	96	108	131	171	199	222	238

(1) Note that the total land area was revised in 1971.

3. Population on Farms

Predictably, the reduction in the number of farms over the years has brought about a corresponding decline in the numbers of people living on farms. The official farm population figures for 1986, at the time of this report, have not been released by Statistics Canada but estimates have been made by this Division, based upon trends from previous Censuses. Table 2 provides the figures for Prince Edward Island. The figures show that from 1931 to 1986 the percentage of the total Prince Edward Island

Table 2

TOTAL POPULATION AND FARM POPULATION

PRINCE EDWARD ISLAND, 1931-1986

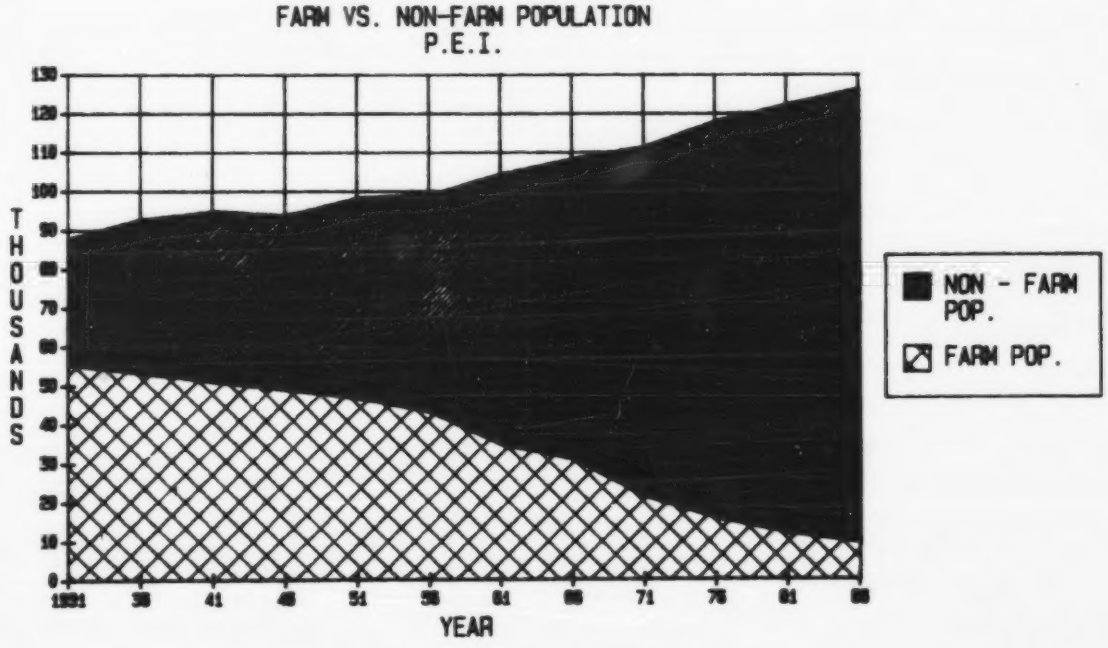
	1931	1941	1951	1961	1971	1981	1986
Total Population	88,083	95,047	98,429	104,629	111,641	122,506	126,646
Farm Population(1)	55,478	51,067	46,855	34,753	21,338	12,015	9,500*
Percentage Living on Farms	63.0	53.7	47.6	33.2	19.1	9.8	7.5*

1. Population living on all census-farms except for 1976 which refers to Agriculture Holdings.

* estimated

population that live on farms fell from 63 percent to an estimated 7.5 percent. The farm population, which stood at 55,478 in 1931 is estimated to have declined to only 9,500 by 1986. Conversely during this same period the total non farm population of the Island grew from 32,560 to reach 117,100 in 1986. This is graphically presented in Diagram 1.

Diagram 1



4. Farm Organization

Table 3 provides a comparison between 1981 and 1986 of the various types of farm organization on Prince Edward Island.

Table 3

CENSUS OF AGRICULTURE STATISTICS

TYPE OF FARM ORGANIZATION

	1981	1986
Total Number of Farms	3,154	2,833
Type of Organization		
Individual or Family Farm	2,639	2,278
Partnership		
with written agreement	168	174
without written agreement	211	197
Legally Constituted Company		
Family	119	154
Other (1)	6	19
Other Type (2)	11	11

1. A legally constituted company with most of the shares owned by some other person(s) or business.

2. Farms operated by institutions, community pastures, lands operated privately for an estate or trust company, Hutterite colonies and co-operative farms were included in "other" type of organization.

Three main forms of farm organization exist on Prince Edward Island. These include: 1) individual or family farms, 2) partnerships and 3) legally constituted companies. The most common form by far is the individual or family farm which accounted for 83.7 and 80.4 per cent of total farms in 1981 and 1986 respectfully. In 1986 partnerships constituted 13.1 of

farms and legally constituted companies formed 6.1 per cent of the total. The most notable trend in this data is the decline of individual or family farms, (3.3 per cent decrease), with an increase in favor of the number of family company farms, which increased from 119 to 154.

5. Agricultural Land Use

Statistics provided in Table 4 provide a picture of the changing mix of Prince Edward Island's agricultural land use. Improved land on Prince Edward Island has decreased from

Table 4

LAND USE STATISTICS

P.E.I. 1931-1986

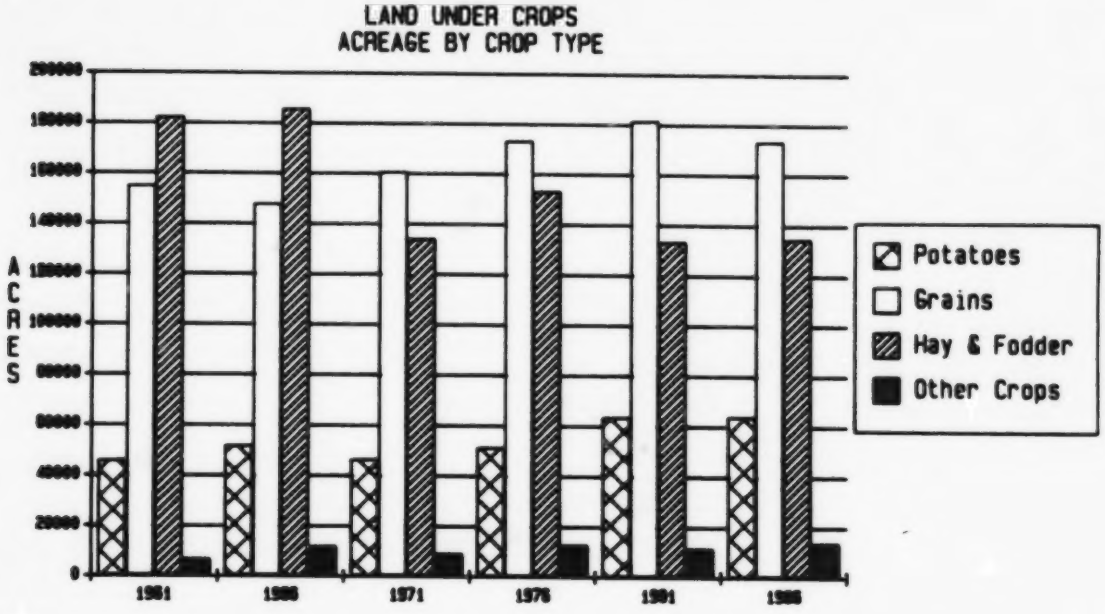
	1931	1941	1951	1961	1971	1981	1986
Use of Land (Acres)							
Improved Land	765,772	737,400	645,795	579,558	494,131	500,853	460,399
Under crops	497,114	470,351	426,210	391,112	351,384	391,534	386,715
Pasture	242,195	237,062	197,937	167,913	114,271	89,521	55,899
Summerfallow	8,723	3,943	1,806	2,532	9,186	7,481	6,541
Other Improved Land	17,740	26,044	19,842	18,001	19,290	12,733	11,244
Unimproved Land	425,430	431,468	449,509	380,599	280,499	198,514	212,797
Woodlot	339,076	315,780	346,191	296,759	210,911	161,697	151,225
Other Unimproved Land	86,354	115,688	103,318	83,840	69,588	36,817	61,572

765,772 acres in 1931 to 460,399 acres in 1986 but the amount of improved land as a percentage of total farm land increased slightly from 64.3 per cent to 68.4 per cent. The largest reduction of improved land has been in the amount of land devoted to pasture which has declined by 76.9% or 186,296 acres in the last 55 years. This can largely be attributable to mechanization of farming.Acreage under crops declined significantly between 1931 and 1961 since when it has been fairly constant at about 390,000 acres.

Diagram 2 displays the percentage breakdown of land under crops by major crop seeded. The graph shows grains as the main crop in 1986 with 173,649 acres seeded (44.9 % of total land

under crops). Grain has led seeded acreage since 1971 prior to

Diagram 2



which the acreage in hay and fodder predominated. Hay and fodder was second at 134,884 acres or 34.9 per cent of total crop acreage and potato acreage of 64,219 was a distant third at 16.6 per cent. Prince Edward Island's acreage in potatoes was higher than any other province in Canada. A variety of other crops accounted for the remaining 3.5 per cent of cropland.

The amount of unimproved farm land also shrank drastically over the past half century , falling from 425,430 in 1931 to 212,797 in 1986. This decline is largely attributable to the decline in woodland held by farmers on Prince Edward Island.

6. Size of Farms

Table 5 provides statistics on the total number of farms classified by size of farm for selected years from 1961 to 1986.

Table 5

FARMS CLASSIFIED BY SIZE OF FARM

PRINCE EDWARD ISLAND, 1961-1986

	1961	1966	1971	1976	1981	1986
Total number of farms	7,335	6,357	4,543	3,677	3,154	2,833
Farms classified by size of farm						
under 3 acres	51	40	33	34	77	100
3-9 acres	91	96	58	60	72	80
10-69 acres	1,414	1,037	660	575	423	380
70-129 acres	2,845	2,326	1,447	961	735	558
130-179 acres	1,398	1,149	835	562	457	383
180-239 acres	863	862	653	549	414	381
240-399 acres	558	658	611	585	577	512
400-559 acres	86	137	145	107	217	231
560-759 acres	17	31	62	76	87	101
760-1,119 acres	9	15	19	40	57	67
1,120-1,599 acres	2	2	12	18	24	20
1,600 acres and over	1	4	8	10	14	20

The table indicates the growing number of farms of 400 acres and more over the years, which reached 439 in 1986. By contrast the number of farms below this size declined steadily, with the exception of very small holdings.

The data in Table 5 for 1961 and 1986 are portrayed in Diagram 3 which shows graphically the change in the distribution of farms by size. Farms in the 70 to 129 acre range were predominant in 1961 (accounting for 38.8 %) whereas farms greater than 180 acres accounted for a relatively small portion (21.0 %) of total farms. The 1986 distribution shows that farms greater than 180 acres had increased to 47.0 per cent of total farms. The most significant increase during this period was in farms over 400 acres which moved from 1.6 to 15.5 per cent of the total number of farms.

Diagram 3

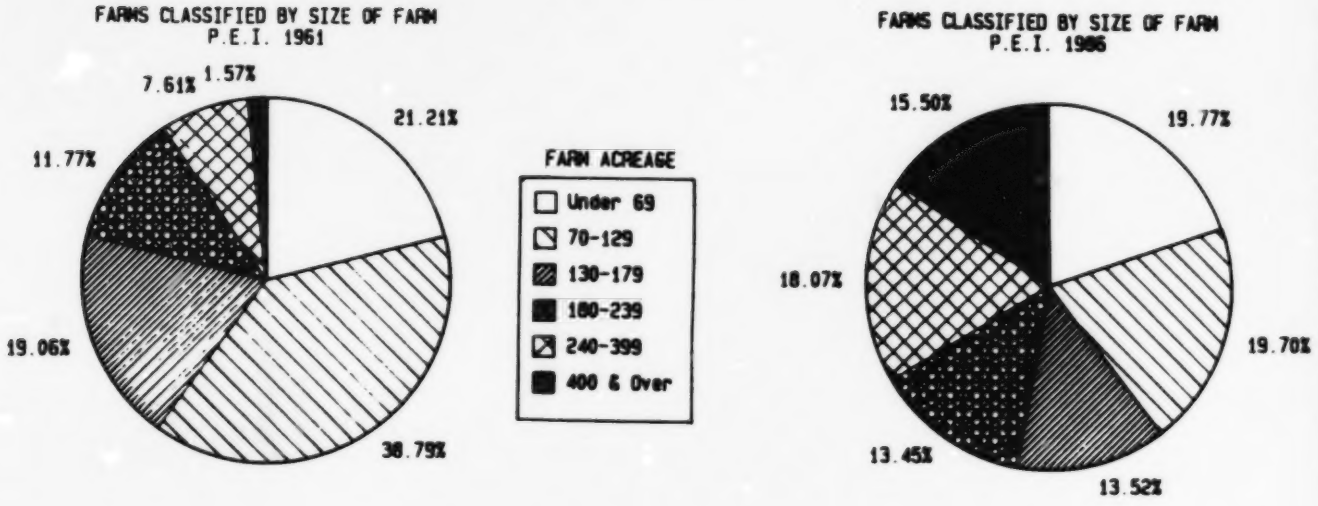
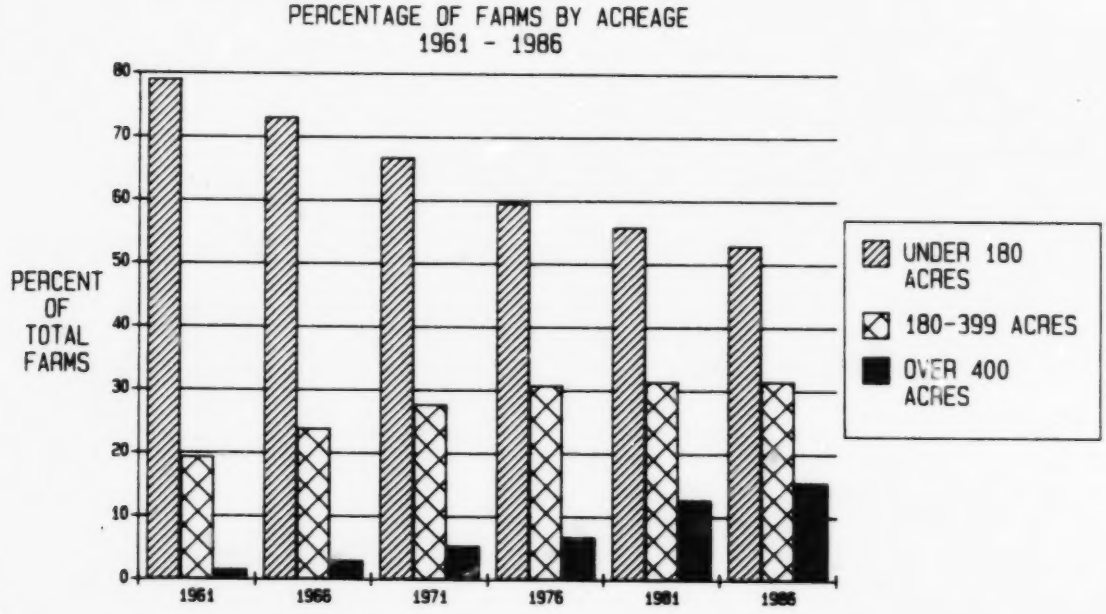


Diagram 4 illustrates the rise in farm size from a different view point between 1961-1986. Farms under 180 acres decreased

Diagram 4



from 79.1 per cent to 53.0 per cent of all farms. The percentage of farms in the 180-399 and 400 and over acre sizes grew from 19.4 to 31.5 and 1.6 to 15.5 per cent respectively. Since 1976 the 180-399 acre group levelled off at the 31.0 to 32.0 per cent range while those farms over 400 acres continued to expand, increasing from 6.8 to 15.5 per cent of the total number of farms.

Table 6 along with Diagram 5 provides statistics on the number of farms by amount of sales for Prince Edward Island.

Table 6

CENSUS FARM DATA CLASSIFIED BY SALES CLASS

PRINCE EDWARD ISLAND 1971, 1976, 1981 & 1986

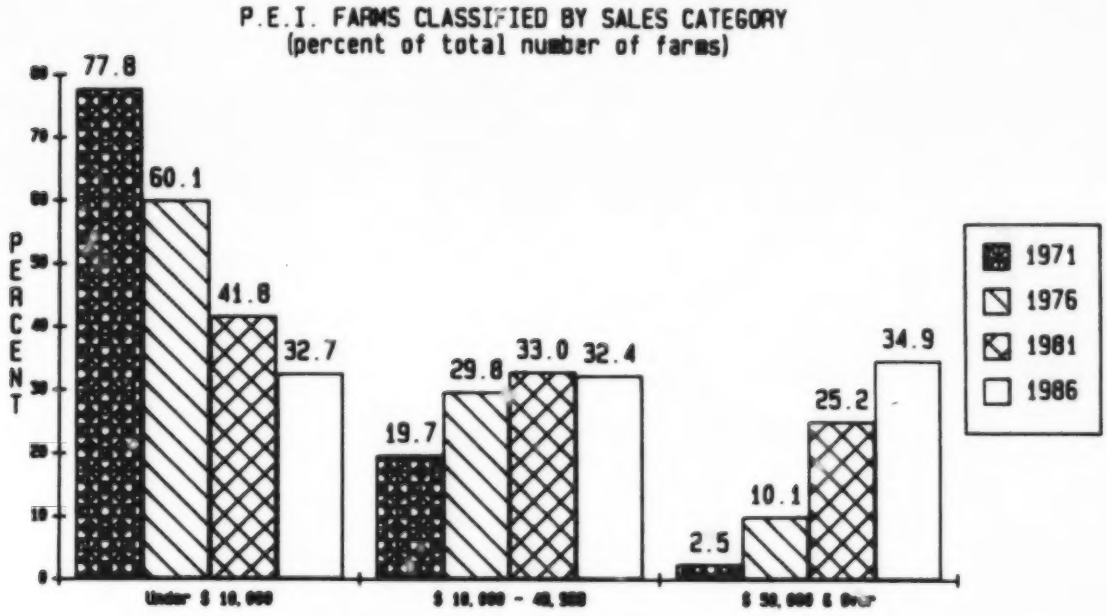
	1971		1976		1981		1986	
	No. of Farms	%	No. of Farms	%	No. of Farms	%	No. of Farms	%
Total Value of Agricultural Products Sold								
$500,000 and over							44	1.6
*250,000 - 499,999			149	4.0	82	2.6	108	3.8
100,000 - 249,000	115	2.5			299	9.5	401	14.2
50,000 - 99,999			224	6.1	414	13.1	433	15.3
25,000 - 49,999	221	4.9	367	10.0	473	15.0	422	14.9
10,000 - 24,999	673	14.8	727	19.8	569	18.0	496	17.5
5,000 - 9,999	909	20.0	543	14.8	386	12.2	292	10.3
2,500 - 4,999	862	19.0	514	14.0	362	11.5	262	9.2
Under $2,500	1,755	38.6	1,146	31.1	569	18.1	375	13.2
Institutional/farms	8	0.2	7	0.2	(1)	-	(1)	-
Total Number of Farms	4,543	100.0	3,677	100.0	3,154	100.0	2,833	100.0

1: In 1981 all Institutional farms are included in their specific class.
* Prior to 1986 this category should read "250,000 and over."

Farms with sales over $ 50,000 have increased from just 2.5 per cent of the total in 1971 to 34.9 per cent of the total number of farms in 1986. The data graphed in Diagram 5 reveals that in 1986 the number of farms in each of the three sales groups (under $10,000, $10,000 - 49,999, $50,000 +) was equally distributed : 32.7, 32.4 and 34.9 per cent respectively. The

growth in farms with $50,000 or more sales is clearly revealed. The contribution to total sales of these farms was not provided in the data released to date from the 1986 census. The 1981 Census of Agriculture showed that farms with sales over $50,000 provided 79.0 percent of the value of total farm sales. Of those, the farms with sales over $100,000 had 59.0 percent of total sales.

Diagram 5



7. Farms by Age of Operator

Farms classified by age of operators for selected years are presented in Table 7. For the past 25 years the largest age group for farmers on P.E.I. has been 45-54 years of age. In 1986 more farm operators (12.5 %) were in the 50-54 age group than in any other. By comparison farm operators at the national level were slightly older as the 55-59 year age group led all categories. The number of farms operated by persons 70 years of age and over measured 7.8 per cent of total farms in 1986. This represents the highest level since 1961 when 9.5 per cent of operators were 70 years and over. At the other end of the spectrum the percentage of operators under 25 years of age stood

at 2.7 per cent in 1986, down from 3.8 per cent in 1981, but still higher than earlier censuses.

Table 7

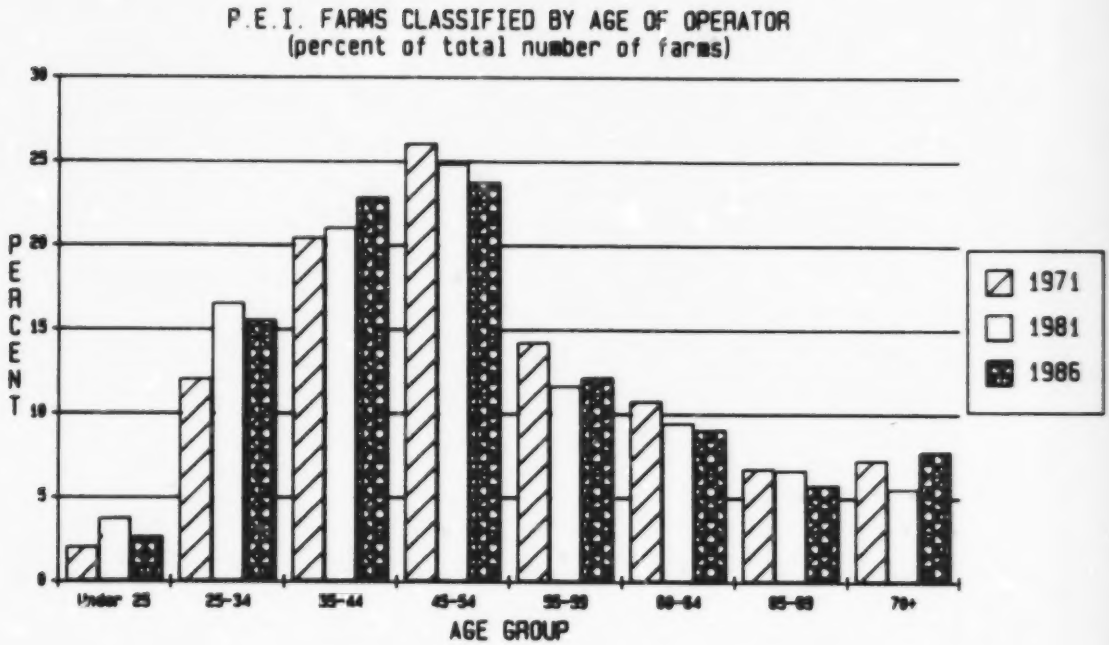
FARM CLASSIFIED BY AGE OF OPERATOR

PRINCE EDWARD ISLAND, 1931-19861

	1931	1941	1951	1961	1971	1981	1986
Farms classified by age of operator							
Operators reporting	12,213	11,360	10,124	7,335	4,543	3,154	2,833
Under 25 years	276	247	225	172	96	119	77
25-34 years	1,532	1,481	1,457	867	549	523	443
35-44 years)			2,442	1,479	931	667	649
45-54 years)	6,655	6,151	2,317	1,936	1,186	786	674
55-59 years)			1,092	811	650	369	347
60-64 years)				761	490	300	259
65-69 years)	2,224	2,036	1,664	607	309	212	164
70 years and over	1,526	1,445	927	702	332	178	220

Diagram 6, compares data from Table 7 for the years 1971, 1981 and 1986. It illustrates that an increasing proportion of the total number of farm operators were in the 35-44, 55-59 and 70 plus ranges from 1981 to 1986. These three groups increased respectively from 21.1, 11.7 and 5.6 per cent in 1981 to 22.9, 12.2 and 7.8 per cent in 1986. Farm operators in the 35-44 year range were the only group to have consistently increased over the 1971 to 1986 period, growing from 20.5 to 21.1 to finally 22.9 per cent in 1986.

Diagram 6



8. Farms by Product

For purposes of designating farms by main product category the number of farms with sales of $2,500 or more are measured. Of the 2,833 census-farms, 2,458 had sales of $2,500 or more. The decomposition of these farms by type of product produced is shown in Table 8. The data in this table indicates that 26.5 per cent of farms (652) had cattle as their main product, dairy farms were second at 23.8 per cent (584), and field crop (other than small grains) farms third at 19.2 per cent (474).

Table 8

FARMS WITH SALES OF $2,500 OR MORE, CLASSIFIED BY PRODUCT TYPE, PRINCE EDWARD ISLAND, 1961-1986

	1961	1966	1971	1976	1981	1986
Total Farms (sales $2,500 +)	2,886	3,328	2,780	2,524	2,585	2,458
Dairy	283	388	629	846	768	584
Cattle	n/a	n/a	372	334	547	652
Hogs	n/a	n/a	259	216	255	221
Poultry	41	22	1	19	26	28
Wheat	-	-	-	13	5	4
Small Grains	5	8	11	126	85	90
Field crops other than small grains	735	1,226	616	471	462	474
Fruits and vegetables	37	44	26	30	53	60
Miscellaneous specialty	9	9	n/a	21	88	149
Livestock combination	945	700	n/a	319	204	127
Field crop combination	40	24	16	77	48	n/a
Other combinations	121	138	67	52	44	69

n/a: Not available

9. Farm Capital

Statistics on farm capital are provided in Table 9 for selected years 1931-1986. Diagram 7 using data from Table 9 tracks the meteoric rise farm capital experienced between 1971 and 1981. Total Capital value rose from $58.3 million in

Table 9

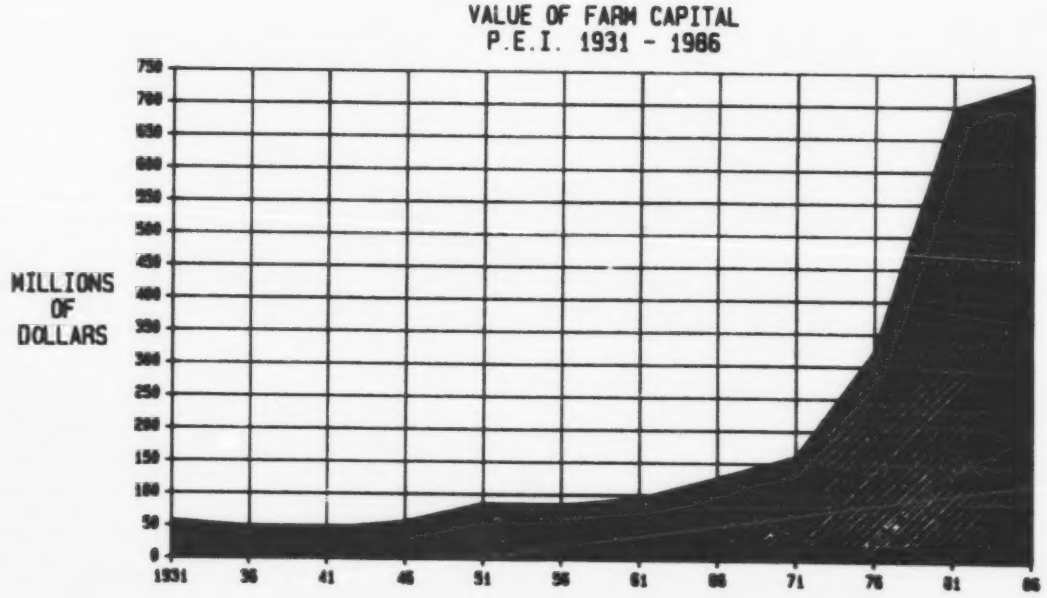
STATISTICS ON FARM CAPITAL

PRINCE EDWARD ISLAND 1931-1986

	1931	1951	1961	1971	1981	1986
CAPITAL ($)						
Total capital value	58,332,029	87,153,205	96,296,500	161,874,000	699,470,000	738,631,854
Average per farm	4,534	8,598	13,128	35,632	221,772	260,724
Value of land and buildings	42,920,400	47,843,719	52,500,800	102,090,000	478,845,000	489,544,771
Average per farm	3,336	4,720	7,158	22,472	151,821	172,801
Value of machinery and equipment (1)	8,115,900	16,261,195	26,856,300	38,273,000	148,971,000	170,804,062
Average per farm	631	1,064	3,661	8,425	47,232	60,291
Value of livestock and poultry	7,295,729	23,048,291	16,939,400	21,511,000	71,654,000	78,283,021
Average per farm	567	2,274	2,309	4,735	22,718	27,633

1. Does not include automobiles.

Diagram 7



1931 to $738.6 million in 1986. The average capital value per farm on Prince Edward Island rose from $4,534 in 1931 to $260,724 by 1986. This large increase is largely attributable to the inflation fueled growth of the 1970's. Total capital value increased by 332.1 per cent between 1971 and 1981, based upon growth of: land and buildings + 369.0 per cent, machinery and equipment + 289.0 per cent , livestock and poultry + 233.0 per cent. Using the Consumer Price Index for Canada, All Items, one can get a clearer indication of this rapid expansion. In 1951 the average capital value per farm on P.E.I. measured $50,876 in 1986 dollars. The 1986 figure of $260,724, can be compared to that amount.

CONCLUSION

The 1986 Census of Agriculture informs us that the amount of farmland on Prince Edward Island continues to shrink and the average size of farms continues to climb. The farm population is estimated to have declined by over 20 per cent in the past five years alone. Farms of over 400 acres continue to increase in number and although the majority of farms are still individual or family organizations, partnerships and family corporations are becoming more prevalent,especially in terms of total farm sales.

Further information on the 1986 Census of Agriculture is available from the Economic, Statistics and Fiscal Analysis Division of the Prince Edward Island Department of Finance, phone number (902)-368-4032.